

CLAIMS

I/we claim:

1. A headlamp for a vehicle, said headlamp having a first
5 light distribution pattern having a horizontal cutoff line formed
by a first reflecting optical system, comprising:

a first light source including,

a first semiconductor light emitting unit in which
a substantially rectangular first light emitting chip is
10 covered by a substantially hemispherical first mold lens,
and

a first reflector reflecting light emitted from the
first light source toward a front part of a lighting unit,
wherein the first light source is oriented such that the

15 first light emitting chip is positioned substantially
horizontally with a side of the light emitting chip that is set
substantially horizontally, and

the first reflecting optical system forms the horizontal
cutoff line by selectively utilizing the light emitted from the
20 first light source and reflected by the first reflector in a
first reflecting region positioned in a substantially front
direction of the light emitting chip.

2. The headlamp according to claim 1, said headlamp having
a second light distribution pattern having an oblique cutoff
25 line rising from the horizontal cutoff line at an angle by a
second reflecting optical system, comprising:

a second light source including,

a second semiconductor light emitting unit in which
a substantially rectangular second light emitting chip
30 is covered with a second substantially hemispherical mold
lens, and

a second reflector reflecting light emitted from

the second light source toward a front part of said lighting unit,

wherein the second light source is oriented such that the second light emitting chip is inclined downward at said angle with respect to a horizontal direction with a side of the second light emitting chip that is set substantially horizontally, and

the second reflecting optical system forms the oblique cutoff line by selectively utilizing light emitted from the second light source and reflected by the second reflector in a second reflecting region positioned in a substantially front direction of the light emitting chip.

3. The headlamp according to claim 2, wherein the first reflector and the second reflector are formed integrally with one another.

4. The headlamp of claim 3, wherein said first reflector and said second reflector are integrally formed on a common holder positioned therebetween.

5. The headlamp of claim 2, wherein said angle is about 15 degrees.

6. The headlamp of claim 2, wherein said angle is 15 degrees.

7. The headlamp of claim 1, wherein said first light reflecting region corresponds to an angular range of about 50 degrees with respect to a central axis of light emitted by the first semiconductor light emitting unit.

8. The headlamp of claim 2, wherein said second light reflecting region corresponds to an angular range of about 50 degrees with respect to a central axis of light emitted by the second semiconductor light emitting unit.

9. The headlamp of claim 1, said first reflector further comprising inner and outer peripheral sides that receive light generated at a peripheral region of the first light emitting chip.

10. The headlamp of claim 9, wherein the peripheral region corresponds to an area outside an angular range of 50 degrees with respect to a central axis of light emitted by the first semiconductor light emitting unit.
- 5 11. The headlamp of claim 2, said second reflector further comprising inner and outer peripheral sides that receive light generated at a peripheral region of the second light emitting chip.
12. The headlamp of claim 11, wherein the peripheral region
10 corresponds to an area outside an angular range of 50 degrees with respect to a central axis of light emitted by the second semiconductor light emitting unit.
13. A headlamp having a light distribution pattern having a horizontal cutoff line and an oblique cutoff line rising from
15 the horizontal cutoff line at an angle, formed by a reflecting optical system that comprises:
- a first light source having a first semiconductor light emitting unit including a first light emitting chip covered by a first mold lens;
- 20 a first reflector reflecting light emitted from the first light source toward a front of a lighting unit;
- a second light source having a second semiconductor light emitting unit including a second light emitting chip covered with a second mold lens; and
- 25 a second reflector reflecting light emitted from the second light source toward a front of said lighting unit,
- wherein the first light emitting chip is positioned substantially horizontally with a side of the light emitting chip, which is set substantially horizontally,
- 30 the second light emitting chip is inclined downward at said angle with respect to said horizontally positioned first light emitting chip,

the horizontal cutoff line is formed by selectively utilizing the light emitted from the first light source and reflected by the first reflector in a first reflecting region positioned in front of the light emitting chip, and

5 the oblique cutoff line is formed by selectively utilizing the light emitted from the second light source and reflected by the second reflector in a second reflecting region positioned in front of the light emitting chip.

14. The headlamp according to claim 13, wherein the first
10 reflector and the second reflector are formed integrally with one another.

15. A headlamp having a light distribution pattern having a horizontal cutoff line and an oblique cutoff line rising from the horizontal cutoff line at an angle, formed by a reflecting
15 optical system that comprises:

 means for generating a first light output and a second light output; and

 means for reflecting said first light output and said second light output from said means for generating toward a front
20 of a lighting unit to produce said horizontal cutoff line and said oblique cutoff line, respectively.